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ABSTRACT

In an attempt to replicate the Wisconsin model of status attainment, this report introduces and analyzes new data from a thirteen-year panel study of males and females, average age of seventeen in 1965-66 (N=6795) and age 30 in 1979 (N=5844). (The Wisconsin model elucidates the important role of high school educational and occupational aspirations and significant others' influence in both the translation of advantage from generation and the role of achievement ambitions and interpersonal support as socialization mechanisms that place individuals in the social structure.) Descriptive statistics and standardized and metric regression coefficients for educational and occupational achievement equations are compared with those reported for four established data sets. Preliminary estimates from the new data generally are shown to compare favorably and as expected with results from earlier studies. Exceptions are noted, as are significant points of noncomparability between the data sets and important limitations in the present form of the new data. Results are interpreted as preliminary, tentative, and qualified support for an implicit null hypothesis that the new data are not likely to produce radically biased estimates for established population parameters. (YLB)

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Status Attainment Replication: The Washington Data

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Boys Town, Nebraska

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Career Development is a project of The Boys Town Center for the Study of Youth Development.

The Center was established in 1972 by Father Flanagan's Boys' Home. Staff operations began in the fall of 1976. The Center seeks to conduct significant research and provide useful knowledge that is relevant to the design of social policies and rehabilitation programs for youth and families.

The Career Development Project represents a long-term institutional commitment to the generation and dissemination of career development information. The project is currently examining the process by which individuals enter careers. The project is directed by Dr. Luther B. Otto. He is assisted by Drs. Vaughn R. A. Call and Kenneth I. Spenner.

ABSTRACT

New data from a 13-year panel study of males and females, average age of 17 in 1965-66 (N = 6795) and age 30 in 1979 (N = 5844), are introduced and analyzed in an attempt to replicate the Wisconsin model of status attainment. Descriptive statistics and standardized and metric regression coefficients for educational and occupational achievement equations are compared with those reported for four established data sets. Preliminary estimates from the new data generally compare favorably and as expected with results from earlier studies. Exceptions are noted, as are significant points of noncomparability between the data sets and important limitations in the present form of the new data. We interpret the results as preliminary, tentative and qualified support for an implicit null hypothesis that the new data are not likely to produce radically biased estimates for established population parameters.

STATUS ATTAINMENT REPLICATION: THE WASHINGTON DATA

In this paper we attempt to replicate the Wisconsin model of status attainment. The replication is approximate rather than exact. Compared to other major status attainment data sets, the Washington data represent an alternate geographic sample and the design measures several variables in a slightly different fashion. Additionally, the Washington data represent a different temporal sampling frame. Whereas other major studies sample the high school classes of 1960 or earlier, this is the first to report outcomes at age 30 for a large group of men and women who graduated from high school in the mid to late 1960s.

Generally, our preliminary results compare quite closely to other studies. Our sample comes from respondents with slightly more advantaged social backgrounds who achieve slightly higher levels of early career socioeconomic attainments compared to other study results reported in the earlier literature. Nonetheless, the process whereby young adults secure formal years of schooling and occupational status by about age 30 is very comparable to that reported for other groups. By way of caveat, we note that these conclusions are based on the first, preliminary assessments of the follow-up data.

Background

The last 15 years of research in social stratification has produced a paradigm widely identified as the status attainment model. The tradition

contains cumulative theory building, hypothesis testing, and methodological innovation. The paradigm seeks to explain the levels of schooling, occupational status, and earnings attained by individuals in the early career stage of the life-cycle. The intergenerational or pre-labor force part of the model says that attainments depend on family socioeconomic background and early human capital stock including academic ability and performance (Blau and Duncan, 1967; Duncan, Featherman, and Duncan, 1972). The Wisconsin version of the model elucidates the important role of high school educational and occupational aspirations and significant others' influence in both the translation of advantage from generation to generation and the role of achievement ambitions and interpersonal support as socialization mechanisms that place individuals in the social structure (see Sewell and Hauser, 1975; Otto and Haller, 1979). The basic model has undergone numerous replications and elaborations. Important for our purposes, the model holds wide geographic and even select cross-cultural validity and reveals more similarities than differences in characterizing the experiences of white men compared to women and non-whites (Featherman and Hauser, 1976; 1978).

The breadth and validity of the status attainment paradigm offer the opportunity to examine the comparability of the Washington data to other major data sets. First, we will compare select means and standard deviations for socioeconomic variables in the Washington data to values reported in other studies. Second, we will compare status attainment regression equations for education and occupation at about age 30 to the corresponding equations reported in the literature for other data sets. Most of our comparisons are for males since stable population estimates of parameters are much more readily available for that population subgroup.

Our replication of the status attainment model is best viewed as conceptual or approximate rather than exact (Otto and Haller, 1979). Differences in sampling procedures and measurement preclude the more precise form of replication. Further, our conclusions are necessarily preliminary and tentative. When a new data set "comes on-line" it typically requires adjustment, fine-tuning and final adjustment before results can be considered final. These are the first analyses that use the follow-up data for the Washington sample and not all calibrations have been made. Some of our variables await data checks and are not yet in final form, such as current occupational status and educational attainment. Other variables, such as mental ability, are still being constructed (in this case from high school transcripts). In this paper we use a Wave I measure of mental ability for a subsample of respondents. For other variables, namely wage and salary incomes which typically require extensive editing and cleaning, we include some descriptive statistics here but forego discussion of the regression equations. Although the grosser forms of data editing and coding are complete, additional fine-tuning and metric manipulation remains before finalizing the variable selection for systematic analyses and publication.

Data, Variables, and Methods

The Washington data consist of 13-year panel data. Time 1 data were gathered from juniors and seniors enrolled in a sample of public high

schools in the State of Washington in 1965-66. A stratified random sample of high schools was drawn based on the number of junior and senior students enrolled and the proportionate number of schools with the same level of enrollment. All juniors and seniors in the selected high schools were included in the study sample. The overall response rate was 86 percent (N = 6795). In 1979 (time 2), telephone interviews were successfully conducted with 87.8 percent of the time 1 respondents. Additional social psychological information was gathered by a mailback questionnaire. The combined survey procedures provided detailed information on family, education, work and military histories through age 30. Our dependent variables --educational, occupational, and earnings attainments--were provided by the time 2 study. Predictor variables were provided in the time 1 study. Portions of the analysis are based on subsamples as specified.

We selected several data sets for comparison. They include: the Occupational Changes in a Generation-II (hereafter OCG; see Featherman and Hauser, 1978); data on 1957 Wisconsin high school graduates (hereafter WISC; see Sewell and Hauser, 1975); data on 17-year-old males enrolled in high school in Lenawee County, Michigan, in 1957 (hereafter LC; see Otto and Haller, 1979); and data on male high school sophomores enrolled in a national sample of schools in 1955 (hereafter, EEO; see Alexander, Eckland, and Griffin, 1975). These were selected because of their prominence in the achievement literature, our familiarity and working acquaintance with the data and our ready accessibility to the data bases.

The samples contain significant similarities and differences when compared to the Washington data. The OCG data represent a national probability sample of male members of the civilian labor force, between the ages of 20 and 65 in March, 1973 (N ≅ 37,500). Where possible, we use a

subsample of non-black males age 20-24 in 1973, which affords maximum comparability to Washington respondents. The major differences include the national scope of the OCG sample, the temporal difference between the 1973 OCG and the 1979 Washington follow-up, and the life-course differences between the ages of 20-24 in the OCG sample and ages 17-30 in the Washington data.

The WISC data refer to a sample of 1957 Wisconsin high school graduates (N ≅ 2,069 males with non-farm background). Respondents were followed-up in 1964 for their educational and occupational attainment, about seven years into their post-high school careers. Where possible, we use WISC data on males with a non-farm background for comparison purposes. Since the Washington data contain only eight percent of respondents from a farm background while WISC and LC data sets contain much higher proportions from farm origins, subsamples with non-farm background afford greater comparability. The WISC respondents are about ten years younger than Washington respondents, include only high school graduates, and were resurveyed at a point in their life-cycle about seven years earlier than the Washington respondents.

The LC data reference the entire age cohort of the 17-year-olds enrolled in high school in 1957 in Lenawee County, Michigan (N = 442). Compared to Washington male respondents, LC respondents are about ten years older and are much more likely to have farm origins. Significantly though, both data sets measure early career achievements at about the same point in the life-course.

The EEO data consist of a sample of high school males who were sophomores in 1955. Respondents were resurveyed 15 years later in 1970. These individuals were resurveyed at the point in the life-course most

comparable to the resurvey of Washington youth, about 12 years after high school (N = 538). Nonetheless, this cohort is about ten years older than Washington respondents. There are, then, noteworthy points of similarity and difference among the samples we compare.

In presenting the measurement of variables for the Washington sample we have borrowed freely from the collation of material by Otto and Haller (1979) that compares the status attainment model using WISC, LC, and EEO data sets. The reader is referred to Otto and Haller (1979) for more extensive measurement discussion and citations.

FATHER'S OCCUPATION: All samples employ the Duncan Socioeconomic Index (SEI) and with the exception of occupational aspirations in LC, all measures of occupation are in the Index. However, the life-course and chronological times of measurement differ.

FATHER'S AND MOTHER'S EDUCATION: The Washington data measure parent education levels in a compressed metric, where: 1 = eighth grade or less; 2 = some high school, but not completion; 3 = high school graduate; 4 = some college, but not graduation; 5 = college graduate; and 6 = more than four years of college. WISC and EEO measure parent education levels in years of formal schooling while OCG and LC use compressed metrics that are different from the Washington measure.

MENTAL ABILITY: Mental ability is measured in a one-digit score where each level indexes an eight-point range in a standardized normal IQ distribution ($\bar{x}$ = 100, s.d. = 15). Hence, 4 = 96.25-103.75; 3 = 88.75-96.25; 5 = 103.75-111.25; and so on. This measure is a temporary expedient that will be replaced with a purified mental ability score when the processing of transcripts is complete. The current measure is available for a

subsample of Wave I respondents (N = 1057). The other data sets use different metrics.

ACADEMIC PERFORMANCE: Grade point average is taken directly from transcripts and refers to the high school years. The measure is available for Wave II follow-up respondents who granted signed release to their high school transcripts. Other data sets use grade point average for the last full year of school prior to testing (LC), centile rank in high school class obtained from high school records (WISC), and self-reported sophomore class standing in quartiles (EEO).

PARENTAL INCOME: The Washington measure is a compressed metric that is crudely logarithmic, where: 0 = under $2,000.00; 1 = $2,000.00-$2,999.00; 2 = $3,000.00-$3,999.00; 3 = $4,000.00-$4,999.00; 4 = $5,000.00-$5,999.00; 5 = $6,000.00-$7,499.00; 6 = $7,500.00-$9,999.00; 7 = $10,000.00-$14,999.00; and 8 = $15,000.00 or over. The measure refers to 1965 income for the family from all sources and the measure is taken directly from parents for the subsample of respondents who were interviewed in 1966 (N = 1079). The WISC and EEO data measured parental income in alternate metrics.

FARM ORIGIN: Farm origin is measured by a dichotomous variable where: 0 = farm, and 1 = non-farm origin. The measure refers to 1966 residents and is available for all Wave I respondents.

NUMBER OF SIBLINGS: Sibship size is measured by the number of living brothers and sisters in 1966 and is available for all Wave I respondents.

EDUCATIONAL ASPIRATION: In the Washington sample, the respondent was asked to mark the education "you think you will actually be able to get." The metric ranges from: 1 = quit high school; 2 = graduate from high school; 3 = attend a junior college, technical or vocational school, or a

business or commercial school; 4 = attend a college or university; 5 = graduate from a college or university; and, 6 = advanced study beyond college. The other data sets contain alternate compressed metrics.

OCCUPATIONAL ASPIRATIONS: The Washington measure uses the Duncan Index assigned to the "occupation...you really plan to have as your career." The WISC and EEO data sets use a comparable measure; the LC measure is the Occupational Aspiration Scale (Haller and Miller, 1961). Only the scores for males should be treated as final here.

EDUCATION: Each sample scores educational attainment in years of formal schooling. Only the WISC data increment years of schooling by one year for any vocational-technical education. The OCG data truncate years of schooling at 17 or more years. The Washington and EEO measures are taken approximately 12 years after high school graduation, the WISC report is for seven years after high school, and the LC measure refers to 15 years after high school. The OCG measure refers to years of schooling as of March 1973.

OCCUPATION: All samples use the Duncan Socioeconomic Index for respondent's current occupation. The dates of measurement differ across studies but are the same as the date for education completed in each study.

EARNINGS: In the Washington data the wage measure is in dollars and cents per hour, standardized for hours worked per week. Because this variable is not final we only report means and standard deviations.

The matrix of zero-order correlations for this set of variables for Washington male and female respondents is reported in the Appendix, Tables A and B. Similar statistics for the other data sets are reported in Otto and Haller (1979) and Featherman and Hauser (1978).

Comparisons

Table 1 provides the means, standard deviations, and n's for select status attainment variables in the Washington sample by gender. Male and female respondents are very comparable in the level and variation in socioeconomic background variables (father's occupation, father's and mother's education, parental income, percent urban, and number of siblings). For the sample as a whole, the mean fathers' occupation is approximately comparable to the average level of socioeconomic status for clerical and kindred workers in the United States. Levels of parental education are equivalent to a fraction of one year beyond high school education. Further, average level of parental income falls in the interval $7,500.00-$9,999.00, 92 percent of respondents lived in an urban residence during high school, and respondents had an average of 2.7 siblings across the sample. Compared to national level data, family socioeconomic background is slightly more advantaged by about five points in occupation, one year of parent schooling levels, and perhaps $1,000.00 or so in family income, although the latter figure is admittedly rough. Some of this comparative advantage is attributable to the difference between the state of Washington and the nation, some to the nature of the high school sample as some members of the corresponding birth cohorts will have dropped out of high school by the junior year, and some of the advantage is no doubt attributable to the more recent temporal location (1966) of this sample compared to the comparison samples.

On the average, the Washington respondents aspire to obtain a college degree and realistically expect occupational careers that will offer socio-economic status commensurate with managers, officials and proprietors. As expected, the Washington youth score average to slightly above average in mental ability and grade C+ over their high school years in grade point average. As reported in other studies, females score higher in mental ability and grade point average than do their male counterparts while males hold slightly higher educational and occupational aspirations.

At the date of interview in 1979 Washington respondents held jobs with an average occupational status of 48.86, had average hourly earnings of $7.87, and had obtained slightly more than two years of schooling beyond high school. Compared to males, females held jobs with an average of three SEI points more status, earned only 65% of what their male counterparts earned per hour even after adjusting for hours worked per week, and took about three-quarters of a year less formal schooling than males. The implied percentages of men and women currently holding a job in the labor force are 88% and 51%, respectively. This excludes those who are unemployed or looking for work, and compares quite favorably to aggregate labor force statistics for the nation and the state (for the nation in July 1979, 92 percent of men and 60 percent of women aged 25-34 were employed; for the state of Washington, 92 percent of men and 59 percent of women aged 25-44 were employed; the national and state figure includes full and part-time work while our data includes only those working 25 or more hours per week).

A formal comparison of means and standard deviations of select variables in the five studies of socioeconomic achievement is reported in Table 2. Washington respondents' fathers hold jobs that are five to ten status points higher than their counterparts in OCG, WISC, and LC, but are very

comparable to EEO respondents. As noted above, we suspect that much of this difference is one of regional differences in the occupation-industry mix rather than a sample bias. Farming and agriculture related industries are not as prevalent in the Northwest as they are in the Midwest. Rather, forestry, fishing, aircraft, defense, energy and related industries are more prominent in the Northwest. Parent education levels reflect slightly more than a high school education for Washington respondents. The other data sets show parent education levels that are approximately one year less than a high school education. Some of this difference reflects the fact that our Washington parents are one-half generation younger than are their parental counterparts in WISC, LC, and EEO. In sum, our respondents come from slightly more advantaged backgrounds than their counterparts in previous studies and relative to their birth cohort across the nation.

The occupational aspirations of Washington respondents are somewhat higher than the occupational aspirations of WISC respondents but equal to EEO respondents. The mean educational attainment of 14.58 years is slightly less than EEO respondents, about a year more than LC and WISC respondents, and nearly two years more than OCG respondents. The OCG and WISC educational attainment estimates are likely truncated as some sample members are still enrolled in school and have not completed their education while others may return and add to their years of formal schooling. The current, 1979, occupational status of Washington respondents is intermediate to that found in other samples. It is higher than OCG, and WISC, about equal to LC, and somewhat lower than EEO. The mean occupational status for OCG respondents who have been in the labor force for a comparable period of time, those aged 25-34, is 42.74 and compares much more favorably with the Washington figure.

What might we expect from the Washington data in replication of the status attainment model for education and occupation? First, congruent with other studies we expect to corroborate the importance of family socio-economic background, particularly father's occupation, in the achievement of formal schooling and occupational status. Second, we expect that mental ability and academic performance in high school will be important in the achievement of formal schooling but less so in the attainment of occupational status. Third, we expect that both educational and occupational aspirations will be significant determinants of eventual schooling, while occupational aspirations will be a significant determinant of occupational status at about age 30. Fourth, consistent with previous research we expect that educational attainment will be the major and strongest determinant of occupational status. Fifth, with respect to education we expect to explain about half the variance in eventual level of formal schooling. Using prior research as a guide, we expect to explain about 40% of the variation in occupational status. As noted, two of our variables, mental ability and parental income, are tentative and may not perform as expected. If anything, these coefficients of effect might be slightly weaker than those reported in other studies. The trend in the extent to which education and occupation depend on social backgrounds and other status attainment variables shows weaker relationships for younger cohorts of males than for their older counterparts (Featherman and Hauser, 1978).

Tables 3, 4, 5, and 6 report the standardized and metric regression coefficients for status attainment education and occupation equations for Washington sample males and females, respectively. For gender comparisons within the Washington sample we rely on metric regression coefficients since they are unaffected by variance differences in the variables. For

comparisons of regression equations across samples we rely on standardized regression coefficients since they are measures of effect that do not depend on the metric of the variable. Yet, these cross-sample comparisons should be treated carefully as standardized regression coefficients are sensitive to sample-to-sample differences in the variance of variables. Inasmuch as we plan to make more formal gender comparisons in subsequent work, we only highlight selected differences between males and females that appear in these analyses.

The results in Tables 3-6 confirm our original expectations quite well, though more so for males than for females. For males, the final equation for education (Table 3) shows 48.5% of the variance in level of schooling consumed by seven status attainment variables. The most important is grade point average, followed by educational aspirations, occupational aspirations and parent education and occupation levels. As noted below, the estimates for this equation in the Washington sample quite closely replicates previous research. For females, level of formal schooling is less dependent on family socioeconomic background, and less dependent on academic performance in high school and educational and occupational aspirations. Unexpectedly in the case of females, parental income bears a negative relationship to educational attainment with more formal schooling associated with lower levels of parental income. The relative levels of variance explained are comparable for males and females.

For occupational attainment, the final equation for Washington males reveals father's occupation, grade point average, occupational aspirations, and educational attainment to be the significant determinants of eventual status. Educational attainment is by far the strongest of these sources in an equation that accounts for 35% of the variance in occupational status.

This is largely as expected. For females, there are several unexpected findings in these preliminary results. For Washington sample women as for men, education plays the strongest role in determining eventual occupational status. But for women, mental ability is the next most important determinant (the coefficient was not significantly different from zero for males), followed by occupational aspirations, educational aspirations, and parental income. But the coefficients for the latter two variables, educational aspirations and parental income are in an unexpected negative direction. We note that the zero-order correlation between educational aspirations and occupational status for sample women is of the expected size and magnitude ($r = .217$). We forego interpreting this result until conducting further examination of the results. The equation for males explains considerably more variance in occupational status than does the equation for women (35% versus 23%). As a whole, particularly for men, these findings are very consistent with findings from other studies. We pursue the comparison further in Table 7.

Table 7 reports select regression equations of education and occupation from other status attainment studies. The samples and variable measurements are defined in the Methods section. The right-hand column reports the final regression equation for Washington sample males. For education the similarities in the relative importance of variables are striking. For the Washington sample, mental ability is comparatively less important while grade point average is comparatively more important as a determinant of educational attainment. We expect this difference to be resolved when our final mental ability measure is available for all sample respondents. Further, we note that the current equation for the Washington sample excludes significant other variables, that will be included in subsequent

analyses. The coefficients for aspiration variables are quite comparable for other studies, with the importance of educational aspirations exceeding that of occupational aspirations. Washington sample estimates show that educational aspirations are somewhat less important than reported in LC and WISC data sets, but more important than reported in EEO. For occupational aspirations the Washington coefficient is slightly smaller than the LC estimate but about twice the size of the WISC and EEO estimates. The variance explained in educational attainment in the Washington equation is 3% greater than EEO, about 6% less than in WISC, and about 13% less than reported in LC.

Finally, we note that the Washington occupation equation also shows a high level of comparability to estimates from other samples. The regression coefficient for educational attainment (.438 versus .378, .458, and .452) is nearly identical to other studies. Further, the coefficients for father's occupation, grade point average, and occupational aspirations are significantly different from zero, as found in other studies. The magnitude of these coefficients differs somewhat from other estimates, but there is less than perfect agreement among other studies on the magnitudes for these coefficients. Suffice to note that the Washington sample estimates for these variables are generally intermediate to the highest and lowest parameter estimates found in the literature. The only notable discrepancy in the occupation equation is the coefficient for mental ability, which is not significantly different from zero. Again, we expect this to be remedied when the final mental ability measure is available. Finally, the variance explained in the occupation equation is somewhat lower than reported in other studies, but this is not too surprising given the national

decline in the extent to which status attainment variables explain mid-career achievements for younger compared to older age cohorts.

Conclusion

We have introduced new 13-year interval panel data from a large sample of males and females who were first studied during their final years of high school and again at about age 30. Further, we have produced preliminary estimates for an approximate replication of the status attainment model that has developed in stratification research over the past 15 years. Finally, we have compared the preliminary estimates with those produced by four established data bases for the purpose of conducting an initial, tentative, and qualified validation of the Washington data.

The outcomes of our comparative analyses for educational and occupational attainment offer substantial support and replication for the status attainment model as estimated from the Washington sample. We have noted exceptions to the expected patterns of results which are likely but not necessarily due to important dissimilarities in the samples and in the measurement of key variables in the predictive equations. More sensitive and less tentative conclusions await the completion of final adjustments to several variables and, in one case, the construction of a new and better indicator.

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TABLE 1: Means, Standard Deviations and Variable N's for Status Attainment Variables by Gender (Washington Respondents)

VARIABLE	TOTAL SAMPLE $\bar{x}$	s.d.	n	MALES $\bar{x}$	s.d.	n	FEMALES $\bar{x}$	s.d.	n
FOCC[1]	44.92	25.33	4294	44.96	25.32	1994	44.88	25.34	2300
FED	3.22	1.49	6327	3.23	1.49	3236	3.21	1.48	3091
MED	3.18	1.14	6436	3.20	1.13	3248	3.16	1.16	3188
PINC	5.88	1.69	1079	5.83	1.69	742	5.99	1.70	337
MA	4.99	1.76	1057	4.94	1.79	772	5.12	1.70	285
GPA	2.54	.66	4797	2.40	.66	2385	2.69	.63	2412
EASP	4.00	1.29	6671	4.10	1.34	3364	3.90	1.23	3307
OASP[2]	58.75	23.76	2930	59.99	25.39	2115	55.51	18.52	815
URBAN	.92	.28	6617	.92	.27	3373	.91	.28	3244
NSIBS	2.72	1.77	6359	2.69	1.76	3216	2.74	1.78	3143
SEX	1.49	.50	6775	—	—	3436	—	—	3339
CJOB	48.86	22.91	4023	47.28	24.58	2521	51.50	19.50	1502
CWAGE	787.77	495.10	3833	905.76	515.93	2401	589.93	384.01	1432
EDUC	14.19	2.14	5836	14.58	2.21	2863	13.81	1.99	2973

[1]FOCC = Father's occupation, FED = Father's education, MED = Mother's education, PINC = Parental income, MA = Mental ability, GPA = Grade point average, EASP = Educational aspiration in high school, OASP = Occupational aspiration in high school, URBAN = Non-farm background, NSIBS = Number of siblings, CJOB = Current job, CWAGE = Current hourly wage, EDUC = Current educational attainment.

[2]Female and Total Sample N's exclude about 30% of female responses. For Females and Total the estimates for this variable should be treated as preliminary.

TABLE 2: Means and Standard Deviations of Select Variables in Five Studies of Socioeconomic Achievement (Washington Males)

Sample	VARIABLE* FOCC	FED	MED	OASP	EDUC	CJOB
1) Male Washington high school juniors and seniors of 1966 (N = 2863)						
Mean	44.96	3.23	3.20	59.99	14.58	47.28
Standard Deviation	25.32	1.49	1.13	25.39	2.21	24.58
2) OCG: Non-black males age 20-24 in 1973 (N = 3119)**						(Age 25-34: 42.74)
Mean	39.50	(4.56)	--	--	12.80	32.55
Standard Deviation	25.40	(1.82)	--	--	2.19	21.86
3) WISC: Male Wisconsin high school graduates of 1957 with non-farm background (N = 2069)						
Mean	33.1	(10.19)	(10.51)	49.38	13.30	43.30
Standard Deviation	22.4	(3.01)	(2.88)	26.51	1.72	24.41
4) LC: 17-year-old males enrolled in high school in Lenawee County, Michigan in 1957 (N = 340)						
Mean	33.64	(2.27)	(2.56)	(36.19)	13.48	47.05
Standard Deviation	21.78	(1.35)	(1.25)	(12.56)	2.50	25.21
5) EEO: Male high school sophomores enrolled in a national sample of schools in 1955 (N = 538)						
Mean	43.35	(10.36)	(10.94)	59.88	14.72	53.52
Standard Deviation	20.23	(3.71)	(2.88)	24.98	2.66	23.53

*Figures in parentheses are not measured in the same metric as the Washington sample. Exact N's for each variable may vary from the figure listed in Column 1.

**OCG: Occupational Changes in a Generation, II (see Featherman and Hauser, 1978); WISC: Wisconsin Study (see Sewell and Hauser, 1975); LC: Lenawee County Study (see Otto and Haller, 1979); EEO: Explorations in Equality of Opportunity (see Alexander, et al., 1975).

TABLE 3: Standardized Regression Coefficients and Coefficients of Determination for the Recursive Structural Models of Education and Occupation (Washington Males Only, Decimals Omitted)

VARIABLES[1]						
			EDUCATION			
FOCC	160*	113*	101*	070*	074*	
FED	192*	159*	103*	063*	065*	
MED	162*	134*	077*	061*	063*	
MA		307*	065*	016*	014	
GPA			511*	381*	381*	
EASP				186*	188*	
OASP				138*	138*	
PINC					-014	
R^2	179	265	442	485	485	
			OCCUPATION			
FOCC	200*	172*	164*	141*	111*	108*
FED	115*	094*	055*	027	-001	-002
MED	074*	057*	016	005	-021	-022
MA		185*	014	-022	-029	-028
GPA			360*	269*	102*	102*
EASP				122*	040	039
OASP				109*	049*	048*
EDUC					437*	438*
PINC						010
R^2	107	138	226	247	346	346

[1]FOCC = Father's occupation; FED = Father's education; MED = Mother's education; MA = Mental ability; GPA = Grade point average; EASP = Educational aspiration; OASP = Occupational aspiration; PINC = Parental income; EDUC = Education.

*Coefficient more than twice its standard error.

TABLE 4: Metric Regression Coefficients and Coefficients of Determination for the Recursive Structural Models of Education and Occupation (Washington Males Only, Decimals Omitted)

VARIABLES[1]						
			EDUCATION			
Intercept	12.02	10.66	8.69	8.47	8.54	
FOCC	014*	010*	009*	006*	006*	
FED	285*	235*	153*	092*	096*	
MED	317*	262*	150*	119*	122*	
MA		381*	080*	019	018	
GPA			1.72*	1.28*	1.28*	
EASP				308*	311*	
OASP				012*	012*	
PINC					-018	
R^2	179	265	442	485	485	
			OCCUPATION			
Intercept	27.34	18.26	2.91	1.24	-39.90	-40.45
FOCC	194*	167*	159*	137*	107*	105*
FED	1.88*	1.56*	911*	438	-013	-040
MED	1.60*	1.23*	352	119	-459	-485
MA		2.54*	191	-302	-396	-384
GPA			13.44*	10.04*	3.81*	3.81*
EASP				2.24*	743	719
OASP				105*	047*	046*
EDUC					4.86*	4.86*
PINC						146
R^2	107	138	226	247	346	346

[1]FOCC = Father's occupation; FED = Father's education; MED = Mother's education; MA = Mental ability; GPA = Grade point average; EASP = Educational aspiration; OASP = Occupational aspiration; PINC = Parental income; EDUC = Education.

*Coefficient more than twice its standard error.

TABLE 5: Standardized Regression Coefficients and Coefficients of Determination for the Recursive Structural Models of Education and Occupation (Washington Females Only, Decimals Omitted)

VARIABLES[1]						
			EDUCATION			
FOCC	171*	166*	128*	103*	120*	
FED	167*	130*	115*	083*	088*	
MED	230*	195*	166*	115*	138*	
MA		234*	048	002	005	
GPA			403*	260*	265*	
EASP				312*	324	
OASP				078*	068	
PINC					-074*	
R^2	208	259	376	455	459	
			OCCUPATION			
FOCC	090*	082*	071*	061	029	046
FED	095*	045	041	053	027	032
MED	052	005	-004	-020	-057	-034
MA		322*	267*	236*	236*	238*
GPA			119*	068*	-014	-008
EASP				-017	-116*	-102*
OASP				188*	163*	154*
EDUC					316*	309*
PINC						-072*
R^2	038	134	144	171	225	228

[1]FOCC = Father's occupation; FED = Father's education; MED = Mother's education; MA = Mental ability; GPA = Grade point average; EASP = Educational aspiration; OASP = Occupational aspiration; PINC = Parental income; EDUC = Education.

*Coefficient more than twice its standard error.

TABLE 6: Metric Regression Coefficients and Coefficients of Determination for the Recursive Structural Models of Education and Occupation (Washington Females Only, Decimals Omitted)

VARIABLES[1]						
			EDUCATION			
Intercept	11.24	10.20	8.24	7.80	8.04	
FOCC	013*	013*	010*	008*	009*	
FED	224*	174*	155*	112*	118*	
MED	395*	336*	285*	198*	238*	
MA		274*	056	002	006	
GPA			1.28*	826*	841*	
EASP				504*	523*	
OASP				008*	007*	
PINC					-087*	
R^2	208	259	376	455	459	
			OCCUPATION			
Intercept	41.59	27.60	21.92	18.75	-5.39	-2.58
FOCC	069*	063*	055*	047	022	035
FED	1.25*	592	535	697	350	420
MED	883	087	-061	-342	-956	-570
MA		3.69*	3.06*	2.71*	2.70*	2.73*
GPA			3.70*	2.12*	-434	-236
EASP				-271	-1.83*	-1.62*
OASP				197*	172*	163*
EDUC					3.09*	3.03*
PINC						-824*
R^2	038	134	144	171	225	228

[1]FOCC = Father's occupation; FED = Father's education; MED = Mother's education; MA = Mental ability; GPA = Grade point average; EASP = Educational aspiration; OASP = Occupational aspiration; PINC = Parental income; EDUC = Education.

*Coefficient more than twice its standard error.

TABLE 7: Select Regression Equations of Education and Occupation from Other Studies (Males Only, Standardized Coefficients, Decimals Omitted)

VARIABLES[1] AND DATASET						
			EDUCATION			
	LC	LC	WISC	EEO	EEO	WASH
FOCC	100*	030	060*	152*	100*	074*
FED	121*	062	054*	085	042	065*
MED	097*	035	037*	048	045	063*
MA	112*	012	058*	378*	211*	014
GPA	495*	266*	209*		237*	381*
PARENT		-041	089*		024	
FRIEND		135*	127*		113*	
TEACHER			--		009	
EASP		344*	338*		160*	188*
OASP		178*	067*		072	138*
PINC			—	106*	028	-014
R^2	461	619	540	309	454	485
			OCCUPATION			
	LC	LC	WISC	EEO	EEO	WASH
FOCC	174*	111*	084*	088*	070	108*
FED	040	-035	--	084	074	-002
MED	012	-052	—	-052	-049	-022
MA	095*	-002	058*	060*	031	-028
GPA	448*	160*	076*		064	102*
PARENT		014	--		-003	
FRIEND		067	—		078	
TEACHER			--		044	
EASP		036	—		025	039
OASP		181*	131*		084*	048*
PINC			—	-007	-033	010
EDUC		378*	458*	540*	452*	438*
R^2	341	503	423	390	415	346

[1]FOCC = Father's occupation; FED = Father's education; MED = Mother's education; MA = Mental ability; GPA = Grade point average; PARENT = Significant other influence-parent; FRIEND = Significant other influence-peers or best friend(s); TEACHER = Significant other influence-teacher or counselor; EASP = Educational aspiration; OASP = Occupational aspiration; PINC = Parental income; EDUC = Education attainment.

*Coefficient more than twice its standard error. - = Coefficient less than twice its standard error and not listed in original source.

TABLE A: Zero-order Correlations Among Select Variables for Washington Males (N = 3436).*

VARIABLES	FOCC	FED	MED	PINC	MA	GPA	EASP	OASP	FARM	NSIBS	CJOB	EDUC
FOCC	1.0000											
FED	0.6012	1.0000										
MED	0.4004	0.5204	1.0000									
PINC	0.4451	0.4178	0.3356	1.0000								
MA	0.2547	0.2480	0.2094	0.1062	1.0000							
GPA	0.2548	0.2992	0.2779	0.1813	0.5314	1.0000						
EASP	0.3459	0.3858	0.3239	0.2888	0.4293	0.5948	1.0000					
OASP	0.3138	0.3387	0.2569	0.2173	0.4309	0.5026	0.5593	1.0000				
FARM	0.2268	0.1322	0.0899	0.1793	0.1187	0.0619	0.1129	0.1915	1.0000			
NSIBS	-0.0913	-0.0766	-0.1080	-0.1720	-0.0939	-0.1054	-0.1216	-0.1323	-0.1179	1.0000		
CJOB	0.2985	0.2731	0.2133	0.1839	0.2637	0.4297	0.3940	0.3573	0.1248	-0.1191	1.0000	
EDUC	0.3404	0.3727	0.3263	0.2217	0.4035	0.6230	0.5647	0.4990	0.0939	-0.1360	0.5668	1.0000

*Pairwise present missing data option used in calculating coefficients.

TABLE B: Zero-order Correlations Among Select Variables for Washington Females (N = 3339).*

VARIABLES	FOCC	FED	MED	PINC	MA	GPA	EASP	OASP	FARM	NSIBS	CJOB	EDUC
FOCC	1.0000											
FED	0.5777	1.0000										
MED	0.3582	0.4824	1.0000									
PINC	0.4173	0.4030	0.4683	1.0000								
MA	0.1660	0.2407	0.2306	0.2082	1.0000							
GPA	0.2190	0.2379	0.2316	0.2461	0.5031	1.0000						
EASP	0.2822	0.3355	0.3280	0.3313	0.3672	0.5088	1.0000					
OASP	0.1579	0.1415	0.2060	0.0911	0.3458	0.4150	0.4483	1.0000				
FARM	0.2267	0.1505	0.0945	0.1663	0.1731	-0.0022	0.0452	0.0288	1.0000			
NSIBS	-0.1022	-0.1243	-0.1494	-0.2289	-0.1682	-0.0858	-0.1509	-0.0651	-0.0576	1.0000		
CJOB	0.1634	0.1724	0.1305	0.0510	0.3474	0.2775	0.2168	0.3029	0.0294	-0.0905	1.0000	
EDUC	0.3499	0.3764	0.3714	0.2554	0.3381	0.5212	0.5747	0.3780	0.0618	-0.1652	0.3822	1.0000

*Pairwise present missing data option used in calculating coefficients.